

General

Title

Primary open-angle glaucoma (POAG): percentage of patients aged 18 years and older with a diagnosis of POAG or their caregiver who were counseled within 12 months about 1) the potential impact of glaucoma on their visual functioning and quality of life, and 2) the importance of treatment adherence.

Source(s)

American Academy of Ophthalmology (AAO). Eye care quality measure: primary open-angle glaucoma: counseling on glaucoma. San Francisco (CA): American Academy of Ophthalmology (AAO); 2015 Jan. 5 p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of patients aged 18 years and older with a diagnosis of primary open-angle glaucoma (POAG) or their caregiver who were counseled within 12 months about 1) the potential impact of glaucoma on their visual functioning and quality of life, and 2) the importance of treatment adherence.

Rationale

1. Scientific basis for assessing counseling in disease impact and adherence
Disease management is a challenge for the patient and the ophthalmologist or optometrist because primary open-angle glaucoma (POAG) is a chronic, frequently asymptomatic condition that may require daily use of multiple and expensive medications (Fiscella et al., 2003) with potential side effects, or may require laser or incisional surgery. Establishing a regimen requires attention to its

effectiveness (potential impact on the disease) and toxicity (the drug-induced side effects), and the degree to which efficacy is reduced by nonadherence to therapy due to visual, physical, social, economic, or psychologic factors. The ophthalmologist should consider these issues in choosing a regimen of maximal effectiveness and tolerance to achieve the desired therapeutic response for each patient (American Academy of Ophthalmology [AAO], 2010).

Patient education and informed participation in treatment decisions may improve adherence and overall effectiveness of glaucoma management (Haynes et al., 2003; Kass et al., 1987; Kass et al., 1986; Osterberg & Blaschke, 2005; Zimmerman et al., 1984). Repeated instruction in proper techniques for using medication may improve adherence to therapy (see above). A study described that greater physician awareness of adherence is necessary to help the patient become adherent (Gelb et al., 2008). More directly, patients with visual field loss in even one eye have noticeable decrements in not only vision related functioning but also visual functioning scores (McKean-Cowdin et al., 2007), yet, ophthalmologists and optometrists do not routinely inquire about this (Fremont et al., 2003). Information gained from asking about this issue of quality of life will increase provider awareness of the impact of the disease in that patient and likely lead to greater intensity of treatment in lowering intraocular pressure (IOP), thereby improving patient outcomes as reported in numerous randomized controlled trials (RCTs).

2. Evidence of gap in care

Published studies indicate that nearly half of patients with POAG fear blindness and visual loss upon diagnosis with glaucoma (Janz et al., 2007), yet physicians inquire about the patient's visual functioning and quality of life less than 1% of the time (Fremont et al., 2003).

As to adherence and compliance, as noted in the guidelines section above, patient adherence and compliance to therapy are no better in glaucoma than in other chronic diseases, suggesting that most patients are not fully compliant or adherent to their use of medications. In addition, several studies indicate that half of patients with POAG in the Medicare population will have at least one 18 month gap in their continuous care over a 5 year time period (Lee et al., 2003), supporting the findings of several single site studies indicating that many patients have failed to keep scheduled appointments.

The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines (from the AAO) and represent the evidence base for the measure:

The diagnosis, severity of the disease, prognosis and management plan, and likelihood of long-term therapy should be discussed with the patient (AAO, 2010).

Adherence to the therapeutic regimen and the patient's response to recommendations for therapeutic alternatives or diagnostic procedures should be discussed (AAO, 2010).

Patients should be encouraged to alert their ophthalmologists to physical or emotional changes that occur when taking glaucoma medications (AAO, 2010). Glaucoma treatments frequently affect patients' quality of life, including employment issues (e.g., fear of loss of job and insurance from diminished ability to read and drive), social issues (e.g., fear of negative impact on relationships and sexuality), and loss of independence and activities that require good visual acuity (e.g., sports and other hobbies). The ophthalmologist should be sensitive to these problems and provide support and encouragement. Some patients may find peer support groups or counseling helpful.

Adequate treatment of glaucoma requires a high level of adherence to therapy. Frequently this is not achieved; studies indicate relatively poor adherence to therapy in one-third or more of patients, depending on the medications used (Kass et al., 1987). Repeated instruction in proper techniques for using medication may improve adherence to therapy (Kass et al., 1986; Zimmerman et al., 1984; Haynes et al., 2003; Osterberg & Blaschke, 2005). At each examination, medication dosage and frequency of use should be recorded (AAO, 2010). Adherence to the therapeutic regimen and the patient's response to recommendations for therapeutic alternatives or diagnostic procedures should be discussed (AAO, 2010). Cost may be a factor in adherence, especially when multiple medications are used (Fiscella et al., 2003).

Evidence for Rationale

American Academy of Ophthalmology (AAO). Eye care quality measure: primary open-angle glaucoma: counseling on glaucoma. San Francisco (CA): American Academy of Ophthalmology (AAO); 2015 Jan. 5 p.

American Academy of Ophthalmology (AAO). Preferred practice patterns. Primary open-angle glaucoma.

San Francisco (CA): American Academy of Ophthalmology (AAO); 2010.

Fiscella RG, Green A, Patuszynski DH, Wilensky J. Medical therapy cost considerations for glaucoma. *Am J Ophthalmol*. 2003 Jul;136(1):18-25. [PubMed](#)

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Haynes R, McDonald H, Garg A, Montague P. Interventions for helping patients to follow prescriptions for medications (Cochrane Review). Chichester: John Wiley & Sons, Ltd.; 2003. 48 p.

Janz NK, Wren PA, Guire KE, Musch DC, Gillespie BW, Lichter PR, Collaborative Initial Glaucoma Treatment Study. Fear of blindness in the Collaborative Initial Glaucoma Treatment Study: patterns and correlates over time. *Ophthalmology*. 2007 Dec;114(12):2213-20. [PubMed](#)

Kass MA, Gordon M, Morley RE Jr, Meltzer DW, Goldberg JJ. Compliance with topical timolol treatment. *Am J Ophthalmol*. 1987 Feb 15;103(2):188-93. [PubMed](#)

Kass MA, Meltzer DW, Gordon M, Cooper D, Goldberg J. Compliance with topical pilocarpine treatment. *Am J Ophthalmol*. 1986 May 15;101(5):515-23. [PubMed](#)

Lee PP, Feldman ZW, Ostermann J, Brown DS, Sloan FA. Longitudinal rates of annual eye examinations of persons with diabetes and chronic eye diseases. *Ophthalmology*. 2003 Oct;110(10):1952-9.

McKean-Cowdin R, Varma R, Wu J, Hays RD, Azen SP, Los Angeles Latino Eye Study Group. Severity of visual field loss and health-related quality of life. *Am J Ophthalmol*. 2007 Jun;143(6):1013-23. [PubMed](#)

Osterberg L, Blaschke T. Adherence to medication. *N Engl J Med*. 2005 Aug 4;353(5):487-97. [127 references] [PubMed](#)

Zimmerman TJ, Kooner KS, Kandarakis AS, Ziegler LP. Improving the therapeutic index of topically applied ocular drugs. *Arch Ophthalmol*. 1984 Apr;102(4):551-3. [PubMed](#)

Primary Health Components

Primary open-angle glaucoma (POAG); patient/caregiver counseling; visual functioning; quality of life; treatment adherence

Denominator Description

All patients aged 18 years and older with a diagnosis of primary open-angle glaucoma (POAG) (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Patients or their caregiver(s) who were counseled within 12 months about 1) the potential impact of

glaucoma on their visual functioning and quality of life and 2) the importance of treatment adherence

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A systematic review of the clinical research literature (e.g., Cochrane Review)

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

Unspecified

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Individual Clinicians or Public Health Professionals

Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

Age greater than or equal to 18 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Person- and Family-centered Care

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Patient-centeredness

Data Collection for the Measure

Case Finding Period

Unspecified

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Patient/Individual (Consumer) Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

All patients aged 18 years and older with a diagnosis of primary open-angle glaucoma (POAG)

Exclusions

Documentation of medical reason(s) for not providing counseling to the patient or caregiver (e.g., patient has impaired mental status and no caregiver)

Note: Refer to the original measure documentation for International Classification of Diseases, Ninth Revision (ICD-9), ICD-10, and Current Procedural Terminology (CPT) codes.

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Patients or their caregiver(s) who were counseled within 12 months about 1) the potential impact of glaucoma on their visual functioning and quality of life and 2) the importance of treatment adherence

Note: Refer to the original measure documentation for Current Procedural Terminology (CPT) codes.

Exclusions

Unspecified

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

Primary open-angle glaucoma: counseling on glaucoma.

Measure Collection Name

Eye Care Quality Measures

Submitter

American Academy of Ophthalmology - Medical Specialty Society

Developer

American Academy of Ophthalmology - Medical Specialty Society

Funding Source(s)

American Academy of Ophthalmology (AAO)

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Financial Disclosures/Other Potential Conflicts of Interest

None

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2015 Jan

Measure Maintenance

Reviewed and updated if appropriate on an annual cycle

Date of Next Anticipated Revision

2016

Measure Status

This is the current release of the measure.

This measure updates a previous version: American Academy of Ophthalmology, Physician Consortium for Performance Improvement®, National Committee for Quality Assurance. Eye care physician performance measurement set. Chicago (IL): American Medical Association (AMA); 2010 Sep. 35 p.

The measure developer reaffirmed the currency of this measure in December 2015.

Measure Availability

Source not available electronically.

For more information, contact the American Academy of Ophthalmology (AAO) at 655 Beach Street, San Francisco, CA 94109; Phone: 415-561-8500; Fax: 415-561-8533; Web site: www.aao.org

NQMC Status

This NQMC summary was completed by ECRI Institute on February 13, 2008. The information was verified by the measure developer on April 22, 2008.

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The information was reaffirmed by the measure developer on December 16, 2015.

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For more information, contact Debra Marchi at the American Academy of Ophthalmology (AAO), dmarchi@aao.org, regarding use and reproduction of these measures.

Production

Source(s)

American Academy of Ophthalmology (AAO). Eye care quality measure: primary open-angle glaucoma: counseling on glaucoma. San Francisco (CA): American Academy of Ophthalmology (AAO); 2015 Jan. 5 p.

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